

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application of:
Gerrit Luinstra et al.

Application No.: 10/523263

Confirmation No.: 1826

Filed: March 7, 2005

Art Unit: N/A

For: CATALYST FOR THE CARBONYLATION
OF OXIRANES

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this

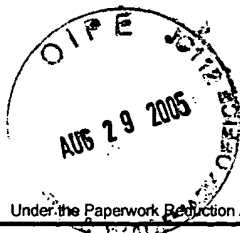
application by this firm) to our Deposit Account No. 03-2775, under Order No. 13156-00001-US.

Respectfully submitted,

By 

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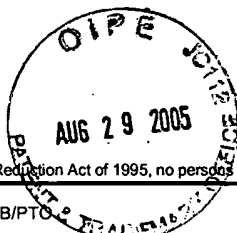
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				Application Number	10/523263-Conf. #1826
				Filing Date	March 7, 2005
				First Named Inventor	Gerrit Luinstra
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	13156-00001-US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA*	US-5,310,948	05-10-1994	Drent et al.	
	AB*	US-5,731,402	03-24-1998	Nishida et al.	

FOREIGN PATENT DOCUMENTS						
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NON PATENT LITERATURE DOCUMENTS				
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	CA	Furukawa et al., "Copolymerization of Carbon Monoxide with Alkylene Oxide", <i>Die Makromolekulare Chemie</i> , Vol. 89, pp. 263-268 (1965).		
	CB	Kamiya et al., "The Reaction Of Small Ring Compound With Carbon Monoxide The Carbonylation Of Oxirane", <i>Chemistry Letters</i> , pp. 1549-1552 (1980).		
	CC	Kowalczyk et al., "Synthesis Of New Glycidylxypropiolactones", <i>Polish Journal Of Chemistry</i> , Vol. 55, pp. 1965-1967 (1981).		
	CD	Rossiter, "Synthetic Aspects and Applications of Asymmetric Epoxidation", <i>Asymmetric Synthesis</i> , Vol. 5, pp. 193-246 (1985).		
	CE	Finn et al., "On the Mechanism of Asymmetric Epoxidation with Titanium - Tartrate Catalysts", <i>Asymmetric Synthesis</i> , Vol. 5, pp. 247-308 (1985).		
	CF	Gao et al., "Catalytic Asymmetric Epoxidation and Kinetic Resolution: Modified Procedures Including in Situ Derivatization", <i>J. Am. Chem. Soc.</i> , Vol. 109, pp. 5765-5780 (1987).		
	CG	Schreiber et al., "Application of the Two-Directional Chain Synthesis Strategy to the First Stereochemical Assignment of Structure to Members of the Skipped-Polyol Polyene Macrolide Class: Mycotin A and B", <i>J. Am. Chem. Soc.</i> , Vol. 109, pp. 8120-8122 (1987).		
	CH	Jacobsen et al., "Enantioselective Catalytic Ring Opening of Epoxides with Carboxylic Acids", <i>Tetrahedron Letters</i> , Vol. 38, No. 5, pp. 773-776 (1997).		
	CI	Furrow et al., "Practical Access to Highly Enantioenriched C-3 Building Blocks via Hydrolytic Kinetic Resolution", <i>J. Org. Chem.</i> , Vol. 63, pp. 6776-6777 (1998).		
	CJ	Jacobsen, "Asymmetric Catalysis of Epoxide Ring-Opening Reactions", <i>Acc. Chem. Res.</i> , Vol. 33, pp. 421-431 (2000).		
	CK	Lee et al., "Synthesis of β -Lactones by the Regioselective, Cobalt and Lewis Acid Catalyzed Carbonylation of Simple and Functionalized Epoxides", <i>J. Org. Chem.</i> , Vol. 66, pp. 5424-5426 (2001).		
	CL	Getzler et al., "Synthesis of β -Lactones: A Highly Active and Selective Catalyst for Epoxide Carbonylation", <i>J. Am. Chem. Soc.</i> , Vol. 124, No. 7, pp. 1174-1175 (2002).		
	CM	Mahadevan et al., "[Lewis Acid] ⁺ [Co(CO) ₄] ⁻ Complexes: A Versatile Class of Catalysts for		
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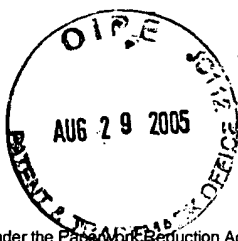
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				Examiner Name	Not Yet Assigned
				Attorney Docket Number	13156-00001-US
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		Carbonylative Ring Expansion of Epoxides and Aziridines", <i>Angew. Chem. Int. Ed.</i> , Vol. 41, No. 15, pp. 2781-2784 (2002).	
	CN	Molnar et al., "Multisite Catalysis: A Mechanistic Study of β -Lactone Synthesis from Epoxides and CO--Insights into a Difficult Case of Homogeneous Catalysis", <i>Chem. Eur. J.</i> , Vol. 9, No. 6, pp.1273-1280 (2003).	

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